Please find below and/or attached an Office communication concerning this application or proceeding.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>08 December 2004</u>.

2a)☒ This action is **FINAL**.        2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-17</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/08/2004</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

1.      Amendment, received on 12/08/2004, has been entered.    Claims 1-17 are

presented for examination.

### Claim Rejections - 35 USC § 103

2.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

3.      Claims 1-8 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Alam et al. (Alam), US Patent No. 6,336,124, and further in view of Makipaa et al.

(Makipaa), US Patent No. 6,556,217.

4.      As to claims 1 and 11, Alam discloses a display device for displaying, on a

display screen, information specified in a document description language for a

structured document, the information being displayed in a mode prescribed for the

document description language, and performing a screen switching in response to a user input, said device comprising:

an analyzer for operable to analyze the information, and operable to divide said information into a plurality of component elements (Abstract: locating data in an input document, grouping data into one or more blocks (component elements));

a rule change instruction part operable to make an instruction for a change of layout rules to be applied to said information (col. 17, line 1 – col. 18, line 36: certain rules may be set and applied to determine how to format the input document);

a layout rule change part containing a plurality of predetermined layout rules applicable to the document description language (col. 17, line 1 – col. 18, line 36: Figure 19 shows determining steps of how component elements are displayed within the displayed configuration, thus there must exist predetermined layout rules in order to determinate how to display the component elements)

user input part operable to receive the user input (col. 5, lines 35-45: user specifies one or more output formats);

a display range determination part operable to determine a display range of the information based on the user input (col. 5, lines 35-45: the one or more output formats may be specified by the user, all of one or more output formats supported and determined based upon the application or device to which the converted data output is outputted);

However, Alam does not explicitly disclose the layout rule change part operable to select one of the layout rules responding to the instruction from said rule change instruction part; a layout part operable to lay out each of the component elements derived by the analyzer according to the layout rule selected by said layout rule change part; and a display part operable to generate screen data of the display range determined by said display range determination part based on the component elements derived by said analyzer and a layout result of each of the component elements, and operable to display the screen data on the display screen.

Makipaa discloses displaying information on a user terminal screen by identifying user terminal type and screen size then extracting layout rules and typographical settings from a database based on the user terminal type, calculating the space required to display the information on the user terminal screen, and the information is then displayed according to the layout rules and typographical settings, on the user terminal screen (col. 3, lines 14-28). Makipaa also discloses the layout rules for terminal type and user profile are retrieved from the user and terminal profile (col. 9, line 8 – col. 10, line 36). Since Makipaa discloses displaying information on any type of user terminal having any size screen and having different types of mechanisms for input of information, which is similar to converting digital data representing an image of a document image stored in one format to other formats for manipulation and display of Alam, thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Makipaa and Alam to include layout

rule change means for selecting one of said layout rules responding to the instruction from said rule change instruction means; layout means for laying out each of said component elements derived by said analysis means according to the layout rule selected by said layout rule change means; and display means for generating screen data of the display range determined by said display range determination means based on said component elements derived by said analysis means and a layout result of each of said component elements, and displaying the screen data on the display screen. Makipaa's system can be able to operate and adapt to the differing input devices to allow for maximum utilization of the terminal the user has.

5.      As to claims 2 and 12, Alam and Makipaa disclose wherein the information includes at least one or more of a text element, a table element, and an image element (Alam, col. 2, lines 12-27).

6.      As to claims 3 and 13, Alam and Makipaa disclose wherein the document description language is a markup language or a hypertext description language (Alam, col. 2, lines 28-36).

7.      As to claims 4 and 14, Alam and Makipaa disclose wherein said rule change instruction part receives the user input, and makes the instruction for the change of the layout rules (Makipaa, col. 3, lines 14-28 and col. 9, line 8 – col. 10, line 36: the motivation to combine Makipaa's system into Alam's is that Makipaa's system can be

able to operate and adapt to the differing input devices to allow for maximum utilization of the terminal the user has).

8.     As to claims 5 and 15, Alam and Makipaa disclose wherein said rule change instruction part refers to the display range determined by said to the display range display range determination part, and makes the change of the layout rules based on an attribute of each of the component elements included in the display range (Alam, col. 17, line 1 – col. 18, line 36: certain rules may be set and applied to determine how to format the input document; col. 5, lines 35-45: the one or more output formats may be specified by the user, all of one or more output formats supported and determined based upon the application or device to which the converted data output is outputted).

9.     As to claims 6 and 16, Alam and Makipaa disclose wherein said rule change instruction the refers to the display range determined by said display range determination the, and makes the instruction for the change of the layout rules based on the layout result of each of the component elements included in the display range (Alam, col. 17, line 1 – col. 18, line 36: certain rules may be set and applied to determine how to format the input document; col. 5, lines 35-45: the one or more output formats may be specified by the user, all of one or more output formats supported and determined based upon the application or device to which the converted data output is outputted).

10.     As to claim 7, Alam and Makipaa disclose wherein each of the layout rules
included in said layout rule change part defines a layout method for each type of the
component elements of said information (Alam, col. 7, line 5 – col. 18, line 36).

11.     As to claim 8, Alam and Makipaa disclose wherein the layout rules to be selected
by said layout rule change part include one type of layout rule for laying out a table
element included in the information in a table structure (Alam, col. 7, line 5 – col. 18, line
36).

12.     Claims 9-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Alam et al. (Alam), and Makipaa et al. (Makipaa) as discussed in claims 1-8 and
11-16 above, and further in view of Thurlow et al. (Thurlow), US Patent No. 6,057,841.

13.     As to claim 9, Alam and Makipaa disclose said display range determination part
follows the user input process rule selected by said user input process rule change part,
and determines the display range of the information based on the user input (Makipaa,
col. 3, lines 14-28 and col. 9, line 8 – col. 10, line 36: displaying information on a user
terminal screen by identifying user terminal type and screen size then extracting layout
rules and typographical settings from a database based on the user terminal type,
calculating the space required to display the information on the user terminal screen,
and the information is then displayed according to the layout rules and typographical
settings, on the user terminal screen.   Makipaa also discloses the layout rules for

terminal type and user profile are retrieved from the user and terminal profile (col. 9, line 8 – col. 10, line 36)).

However, Alam and Makipaa do not explicitly disclose a user input process rule change part containing a plurality of predetermined user input process rules applicable to said user input, said user input process rule change part operable to select one of a plurality of user input process rules applicable to said user input according to the instruction from said rule change instruction part. Thurlow discloses a method that allows users to build rules by choosing predefined conditions and actions, which are presented via a simple graphical user interface (col. 1, lines 55-62). Thurlow also discloses providing a user interface that guides user through the process of creating and editing rules by displaying on the display device a plurality of conditions so the user can selection one of the conditions, in response to the selected condition, representing the selected condition to the displayed state of the rule (col. 9, lines 19-65 and col. 17, line 44 – col. 18, line 54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Thurlow and Alam and Makipaa to include a plurality of predetermined user input process rules applicable to said user input in order to process messages or documents in the most efficient and timely manner.

14.     As to claims 10 and 17, Alam and Makipaa and Thurlow disclose wherein said rule change instruction means instructs, at the same time, said layout rule change means for the change of the layout rules, and said user input process rule change

means for the change of the user input process rules (Alam, col. 17, line 1 – col. 18, line 36: certain rules may be set and applied to determine how to format the input document; col. 5, lines 35-45: the one or more output formats may be specified by the user, all of one or more output formats supported and determined based upon the application or device to which the converted data output is outputted; Thurlow discloses a method that allows users to build rules by choosing predefined conditions and actions, which are presented via a simple graphical user interface (col. 1, lines 55-62). Thurlow also discloses providing a user interface that guides user through the process of creating and editing rules by displaying on the display device a plurality of conditions so the user can selection one of the conditions, in response to the selected condition, representing the selected condition to the displayed state of the rule (col. 9, lines 19-65 and col. 17, line 44 – col. 18, line 54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Thurlow and Alam and Makipaa to include a plurality of predetermined user input process rules applicable to said user input in order to process messages or documents in the most efficient and timely manner).

## Response to Arguments

In the remarks, Applicant(s) argued in substance that

A) The cited prior art fails to disclose or suggest "the display device comprising a layout rule change part containing a plurality of predetermined layout rules applicable to the document description language, the layout rule change part being operable to select one of the layout rules."

As to point A, Alam discloses a layout rule change part containing a plurality of predetermined layout rules applicable to the document description language (Alam, col. 17, line 1 – col. 18, line 36: Figure 19 shows determining steps of how component elements are displayed within the displayed configuration, thus there must exist predetermined layout rules in order to determinate how to display the component elements). However, Alam does not explicitly disclose the layout rule change part operable to select one of the layout rules responding to the instruction from said rule change instruction part; a layout part operable to lay out each of the component elements derived by the analyzer according to the layout rule selected by said layout rule change part; and a display part operable to generate screen data of the display range determined by said display range determination part based on the component elements derived by said analyzer and a layout result of each of the component elements, and operable to display the screen data on the display screen. Makipaa discloses displaying information on a user terminal screen by identifying user terminal type and screen size then extracting layout rules and typographical settings from a database based on the user terminal type, calculating the space required to display the information on the user terminal screen, and the information is then displayed according

to the layout rules and typographical settings, on the user terminal screen (col. 3, lines 14-28). Makipaa also discloses the layout rules for terminal type and user profile are retrieved from the user and terminal profile (col. 9, line 8 – col. 10, line 36). Since Makipaa discloses displaying information on any type of user terminal having any size screen and having different types of mechanisms for input of information, which is similar to converting digital data representing an image of a document image stored in one format to other formats for manipulation and display of Alam, thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Makipaa and Alam to include layout rule change means for selecting one of said layout rules responding to the instruction from said rule change instruction means; layout means for laying out each of said component elements derived by said analysis means according to the layout rule selected by said layout rule change means; and display means for generating screen data of the display range determined by said display range determination means based on said component elements derived by said analysis means and a layout result of each of said component elements, and displaying the screen data on the display screen. Makipaa's system can be able to operate and adapt to the differing input devices to allow for maximum utilization of the terminal the user has.

15.     Applicant's arguments with respect to claim 9 have been considered but are moot in view of the new ground(s) of rejection. Please see the rejection above.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The examiner can normally be reached on 8:00 am – 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).


Chau Nguyen
Patent Examiner
Art Unit 2176

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER